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| FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary) | ATTY. DOCKET NO. I-2-0203.2US | SERIAL NO. 10/084,043 |
| | APPLICANT Joseph A. Kwak | |
| | FILING DATE February 27, 2002 | GROUP 2418 2419 |

| U.S. PATENT DOCUMENTS | | | | | | | |
|-----------------------|--|-----------------|---------|---------------------------|-------|----------|-------------------------------|
| EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
| | | 4,912,705 | 03/1990 | Paneth et al. | | | |
| | | 5,101,406 | 03/1992 | Messenger | | | |
| | | 5,280,498 | 01/1994 | Tymes et al. | | | |
| | | 5,345,439 | 09/1994 | Marston | | | |
| | | 5,345,600 | 09/1994 | Davidson | | | |
| | | 5,351,016 | 09/1994 | Dent | | | |
| | | 5,544,196 | 08/1996 | Tiedemann, Jr. et al. | | | |
| | | 5,570,369 | 10/1996 | Jokinen | | | |
| | | 5,648,969 | 07/1997 | Pasternak et al. | | | |
| | | 5,657,325 | 08/1997 | Lod et al. | | | |
| | | 5,715,260 | 02/1998 | Black et al. | | | |
| | | 5,729,557 | 03/1998 | Gardner et al. | | | |
| | | 5,828,677 | 10/1998 | Sayeed et al. | | | |
| | | 5,838,267 | 11/1998 | Wang et al. | | | |
| | | 5,918,156 | 06/1999 | Tanabe | | | |
| | | 5,946,320 | 08/1999 | Decker | | | |
| | | 5,954,839 | 09/1999 | Park et al. ² | | | |
| | | 5,954,839 | 09/1999 | Park et al. ¹⁷ | | | |
| | | 5,956,624 | 09/1999 | Hunsinger et al. | | | |
| | | 5,982,760 | 11/1999 | Chen | | | |
| | | 5,983,382 | 11/1999 | Pauls | | | |
| | | 5,983,383 | 11/1999 | Wolf | | | |
| | | 5,983,384 | 11/1999 | Ross | | | |
| | | 6,021,123 | 02/2000 | Mimura | | | |
| | | 6,021,124 | 02/2000 | Haartsen ³ | | | |

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| EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|---------------------|--|-----------------|---------|-----------------------------|-------|----------|-------------------------------|
| | | 6,049,549 | 04/2000 | Ganz et al. | | | |
| | | 6,064,692 | 05/2000 | Chow | | | |
| | | 6,128,276 | 10/2000 | Agee | | | |
| | | 6,130,918 | 10/2000 | Humphrey et al. | | | |
| | | 6,134,694 | 10/2000 | Uebayashi et al. | | | |
| | | 6,138,260 | 10/2000 | Ketseoglou | | | |
| | | 6,145,108 | 11/2000 | Ketseoglou | | | |
| | | 6,154,489 | 11/2000 | Kleider et al. | | | |
| | | 6,189,123 | 02/2001 | Anders Nystrom et al. | | | |
| | | 6,208,663 | 03/2001 | Schramm et al. ⁴ | | | |
| | | 6,212,240 | 04/2001 | Scheibel, Jr. et al. | | | |
| | | 6,212,659 | 04/2001 | Zehavi | | | |
| | | 6,226,520 | 05/2001 | Jeoung ¹³ | | | |
| | | 6,233,711 | 05/2001 | Murayama et al. | | | |
| | | 6,262,994 | 07/2001 | Dirschedl et al. | | | |
| | | 6,272,183 | 08/2001 | Berens et al. | | | |
| | | 6,275,488 | 08/2001 | Cudak et al. | | | |
| | | 6,289,003 | 09/2001 | Raitola et al. | | | |
| | | 6,301,479 | 10/2001 | Roobel et al. | | | |
| | | 6,308,294 | 10/2001 | Ghosh et al. | | | |
| | | 6,317,418 | 11/2001 | Raitola et al. | | | |
| | | 6,359,877 | 03/2002 | Rathonyi et al. | | | |
| | | 6,366,601 | 04/2002 | Ghosh et al. | | | |
| | | 6,370,669 | 04/2002 | Eroz et al. | | | |
| | | 6,421,803 | 07/2002 | Persson et al. | | | |
| | | 6,449,246 | 09/2002 | Barton et al. | | | |

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| | FILING DATE February 27, 2002 | GROUP 2416 2419 |

| EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|--------------------------|---|-----------------|---------|--------------------------------|-------|----------|-------------------------------|
| | | 6,470,391 | 10/2002 | Takamoto et al. | | | |
| | | 6,473,399 | 10/2002 | Johansson et al. ¹¹ | | | |
| | | 6,519,065 | 02/2003 | Colbourne et al. | | | |
| | | 6,522,650 | 02/2003 | Yonge et al. | | | |
| | | 6,529,561 | 03/2003 | Sipola | | | |
| | | 6,587,985 | 07/2003 | Fukushima et al. | | | |
| | | 6,601,207 | 07/2003 | Vanttingen ⁵ | | | |
| | | 6,621,807 | 09/2003 | Jung et al. ⁶ | | | |
| | | 6,647,076 | 11/2003 | Schenk et al. | | | |
| | | 6,671,266 | 12/2003 | Moon et al. ⁷ | | | |
| | | 6,735,180 | 05/2004 | Malkamaki et al. | | | |
| | | 6,760,860 | 07/2004 | Fong et al. | | | |
| | | 6,831,910 | 12/2004 | Moon et al. ⁸ | | | |
| | | 6,895,010 | 05/2005 | Chang et al. ⁹ | | | |
| | | 6,907,005 | 06/2005 | Dahlman et al. | | | |
| | | 6,931,569 | 08/2005 | Fong et al. | | | |
| | | 6,956,855 | 10/2005 | Chang ¹⁰ | | | |
| | | 7,164,654 | 01/2007 | Hunzinger et al. | | | |
| | | 2002/0034182 | 02/2002 | Mallory | | | |
| /ST/ | * | 2002/0037000 | 03/2002 | Park et al. ²⁰ | | | |
| | | 2002/0037058 | 03/2002 | Birru | | | |
| | | 2002/0064167 | 05/2002 | Khan et al. | | | |
| | | 2002/0191544 | 12/2002 | Cheng et al. | | | |
| | | 2003/0039226 | 02/2003 | Kwak | | | |
| FOREIGN PATENT DOCUMENTS | | | | | | | |
| EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | TRANSLATION |

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| | <p>APPLICANT Joseph A. Kwak</p> | |
| | <p>FILING DATE February 27, 2002</p> | <p>GROUP 2010 2419</p> |

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|--|--|--------------|---------|------------------|--|--|-----|---|
| | | | | | | | | |
| | | 2352696 | 05/2001 | CA | | | | |
| | | 1132772 | 01/2004 | CN | | | | |
| | | 0797327 | 09/1997 | EP | | | | |
| | | 0859475 | 08/1998 | EP | | | | |
| | | 07-336331 | 12/1995 | JP | | | X** | |
| | | 09-298575 | 11/1997 | JP | | | X** | |
| | | 09-247209 | 09/1997 | JP | | | X** | |
| | | 2000-188609 | 07/2000 | JP | | | X** | |
| | | 01-141431 | 06/1989 | JP | | | X** | |
| | | 09-116597 | 05/1997 | JP | | | X** | |
| | | 2001-103034 | 04/2001 | JP | | | X** | |
| | | 11-046217 | 02/1999 | JP | | | X** | |
| | | 2000-004196 | 01/2000 | JP | | | X** | |
| | | 2003/0004618 | 01/2003 | KR | | | | x |
| | | 2179370 | 02/2002 | RU | | | | |
| | | 2195768 | 12/2002 | RU | | | | |
| | | 2221338 | 01/2004 | RU | | | | |
| | | 2221339 | 01/2004 | RU | | | | |
| | | 2235432 | 08/2004 | RU | | | | |
| | | 2282370 | 10/2003 | RU | | | X | |
| | | 2294055 | 01/2006 | RU | | | X | |
| | | 97118086 | 07/1999 | RU | | | | |
| | | 2001126714 | 07/2003 | RU | | | | |
| | | 431084 | 04/2001 | TW ¹⁹ | | | | |
| | | 00/10298 | 02/2000 | WO | | | | |
| | | 99/12303 | 03/1999 | WO | | | | |

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|--|--|-------------|---------|------------------|--|--|-------------|
| | | 99/09698 | 02/1999 | WO | | | |
| | | 97/37459 | 10/1997 | WO ¹ | | | |
| | | 98/31106 | 07/1998 | WO ¹⁴ | | | |
| | | 01/01624 | 01/2001 | WO ¹⁵ | | | |
| | | 02/33877 | 04/2002 | WO ¹⁶ | | | |
| | | 99/66675 | 12/1999 | WO ¹² | | | |
| | | 2004/038990 | 06/2004 | WO ¹⁸ | | | |

| OTHER DOCUMENTS | | |
|---------------------|--|--|
| EXAMINER INITIAL | DESCRIPTION (Including Author, Title, Date, Pertinent Pages, Etc.) | |
| | "Hybrid ARQ Methods for FDD in Release in 2000," TSG-RAN Working Group 1 Meeting #14, Oulu, Finland, (July 4-7, 2000). | |
| | 3GPP, "Physical Layer Aspects of UTRA High Speed Downlink Packet Access," 3GPP TR 25.848 V4.0.0 (2001-03), pp. 1-89. | |
| | 3GPP, 3 rd Generation Partnership Project; Technical Specification Group Radio Access Network; Physical layer aspects of UTRA High Speed Downlink Packet Access (Release 4), TR 25.848 V4.0.0 (2001-03), p. 50. | |
| | 3GPP, 3 rd Generation Partnership Project; Technical Specification Group Radio Access Network; Report on Hybrid ARQ Type II/III (Release 2000), 3GPP TR 25.835 V1.0.0 (September 2000). | |
| | BAKHTIYARI ET AL. "Practical Implementation of a Mobile Data Link Protocol With A Type II Hybrid ARQ Scheme and Code Combining," Personal Communication – Freedom Through Wireless Technology. Proceedings of the Vehicular Technology Conference, pp. 774-777 (May 18, 1993). | |
| | ERIKSSON ET AL. "Comparison of Link Quality Control Strategies for Packet Data Services in EDGE." Vehicular Technology Conference, 1999 IEEE, pp. 938-942, (May 16, 1999). | |
| | KIM ET AL. "On Hybrid ARQ of Reverse Channel in 1xEV-DV", Montreal Canada, C50-20010709-019 SAMSUNG_Reverse Channel HARQ.doc, (July 10, 2001). | |

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|---|-----------------|
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| EXAMINER INITIAL | DESCRIPTION (Including Author, Title, Date, Pertinent Pages, Etc.) |
|---------------------|---|
| | MUNETI ET AL., "A New Frequency-Domain Link Adaptation Scheme for Broadband OFDM Systems," IEEE VTS 50th Vehicular Technology Conference, Vol. 1, pp. 253- 257 (1999). |
| | ROHLING ET AL. "Performance Comparison of Different Multiple Access Schemes for the Downlink of an OFDM Communication System", 1997 IEEE 47 th Vehicular Technology Conference, May 1997, vol. 3, p. 1368, (May 1997). |
| | SAYEED, "Throughput Analysis and Design of Fixed and Adaptive ARQ/Diversity Systems for Slow Fading Channels." Global Telecommunications Conference, 1998, pp. 3686-3691 (November 8, 1998). |
| | SHIOZAKI ET AL. "A Hybrid ARQ Scheme With Adaptive Forward Error Correction for Satellite Communications." IEEE Transactions on Communications, pp. 482-484 (April 1, 1991). |
| | STALLINGS, "Networking Standards – A Guide to OSI, ISDN, LAN, and MAN Standards", p. 37, (February 1993). |
| | WANG ET AL. "Error Control and Concealment for Video Communication --- A Review ¹ ". |

** Abstract Only

¹ corresponds to JP 2000-507777; ² corresponds to RU 2195768; ³ corresponds to CN 1275279; ⁴ corresponds to CN 1277766; ⁵ corresponds to RU 2001126714; ⁶ corresponds to RU 2195089; ⁷ corresponds to RU 2179370; ⁸ corresponds to RU 2210864; ⁹ corresponds to RU 2221338 ; ¹⁰ corresponds to RU 2221339; ¹¹ corresponds to RU 2235432; ¹² corresponds to CN 1275299; ¹³ corresponds to RU 2138125; ¹⁴ corresponds to RU 2234806; ¹⁵ corresponds to RU 2216868; ¹⁶ corresponds to RU 2236091; ¹⁷ corresponds to RU 2294055; ¹⁸ corresponds to RU 2282310; ¹⁹ corresponds to US 6,181,683; ²⁰ corresponds to KR 2002-45075.

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